



THE CITY OF SAN DIEGO

OFFICE OF THE INDEPENDENT BUDGET ANALYST REPORT

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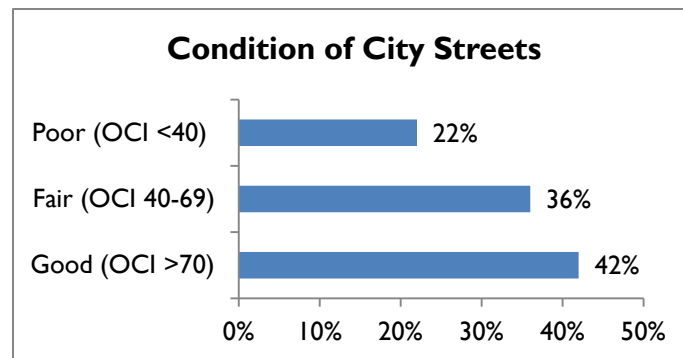
City Council Docket Date: December 4, 2012

Item Number: S-507

Street Preservation Ordinance and Damage Fee

OVERVIEW

Over the past few years, City Council members, citizens, public interest groups, the San Diego County Grand Jury, the Office of the City Auditor (OCA), the media, and others have raised concerns regarding the poor condition of City streets and how these important infrastructure assets are being managed and maintained by the City. Concerns focused on the lack of sufficient investment in street resurfacing, which has resulted in low service levels and a \$478 million backlog of deferred capital and maintenance for streets.¹ The City invested about \$129 million in FY 2010 through FY 2012 which increased the average Overall Condition Index (OCI) for City streets to 59. The City anticipates future investments of about \$50 million per year for fiscal years 2013 through 2017 for resurfacing streets through TransNet funds, lease revenue bonds per the Five-Year Deferred Capital Funding Plan, and other sources.



Concerns have also been focused on utility excavations into newly resurfaced streets and the resulting long-term damage to the street. Pavement deterioration studies show that pavement excavations will significantly degrade and shorten pavement life no matter how well the excavation is restored. The City's Municipal Code relating to excavating within the public right-of-way includes a moratorium to minimize such excavations for streets that have received asphalt overlay or slurry seal treatments for three years and one year, respectively.² In addition, the City requires that public entities obtain a permit and pay an excavation fee to recover current

¹ The pavement condition is generally measured by a weighted index—called the Overall Condition Index (OCI) which is calculated using weighted attribute characteristics, such as surface distress and ride quality. The OCI generally ranges from 0-100 with 100 representing the best street condition.

² San Diego Municipal Codes § 62.1203 and § 62.1204.

and future degradation due to the excavation.³ In its November 2010 report on street maintenance, the OCA found that public and private entities were excavating newly resurfaced streets; the City was not appropriately collecting excavation fees; and fees had not been updated since the schedule was established.⁴ The OCA concluded that the City was losing revenue and missing an opportunity to recover damages to its assets and the General Fund was subsidizing these damages in the form of higher maintenance costs. The report recommended improvements to planning, coordination, and oversight of work conducted in the public Right-of-Way, including updating excavation fees to fully recover costs.⁵ These recommendations were supported in the April 2012 Grand Jury Report on Street Repair, Funding, and Reforms. Staff's initial proposed revisions to the Municipal Code and update to the Excavation Fee, included in Report 12-064, were intended to address several of these audit recommendations. This included updating the Excavation Fee—renamed the Street Damage Fee—to current year costs so that it is fully cost recoverable.

Staff's initial proposed revisions to the Municipal Code were scheduled to be heard at the Land Use and Housing Committee meeting in late July; however, the item was delayed until September 13, 2012 so that the Committee could address concerns raised by private utilities. These concerns were generally related to fee increases resulting from updating the Street Damage Fee to reflect current year costs and the recommended warranty period of 21 years for guaranteeing the excavation. It is important to note that prior to 2011 some private utilities were not paying an excavation fee, because they purportedly had warranty agreements with the City which would have exempted them from paying this fee. During the OCA's audit, it was discovered that the agreements were never formalized. Since the passage of Proposition 26, the City Attorney's Office determined that these types of agreements in lieu of paying a Street Damage Fee would undermine the exception that enables the City to charge a fee. The Development Services Department began charging all private utilities the excavation fee in the fall of 2011.

In response to the concerns raised by private utilities and other groups and in order to move the item to full Council, Land Use and Housing Committee Chairwoman Zapf proposed a compromise to staff's initial recommendations which is outlined in a September 12th memorandum to committee members. The compromise included:

- reducing the fee from full cost recovery to 25% of the proposed increase in FY 2014 and 50% of the proposed increase in FY 2015;
- during this 2-year period, evaluating new technologies that seek to mitigate excavation impacts and updating the 1999 engineering study that serves as the basis of the fee; and
- reducing the warranty period from 21 years to 15 years for wet utilities (water, sewer, and storm water) and 10 years for dry utilities (private utilities).

The fee will have the opportunity to go to full cost recovery in FY 2016.

³ San Diego Municipal Code § 62.1205.

⁴ The current excavation fee is based on 1999 costs included in the technical evaluation that serves as the basis for calculating the fee.

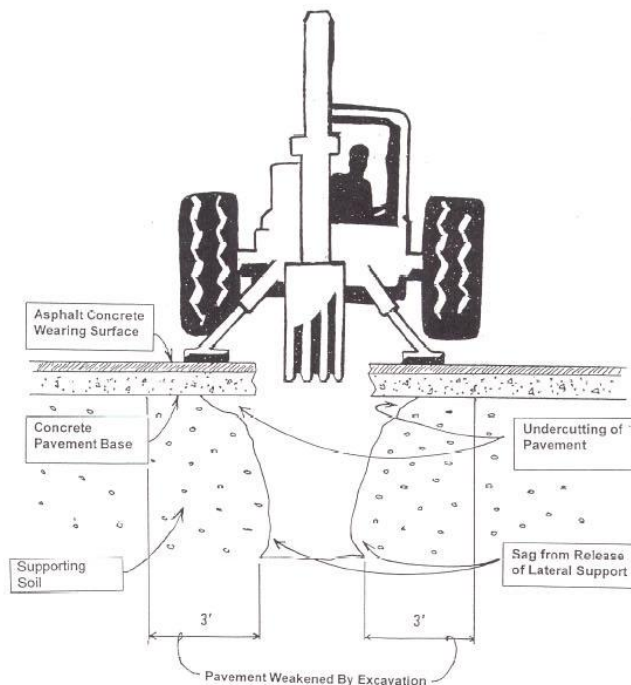
⁵ Since the completion of the audit, 7 of 14 recommendations have been implemented. The proposed Street Preservation Ordinance and Damage Fees are intended to address 5 additional recommendations. The remaining 2 recommendations are underway.

On September 13th, the Committee approved that this item be forwarded to full Council with the changes outlined in Councilmember Zapf’s memorandum. The Committee’s action states that there will be an opportunity to go to full cost recovery in FY 2016. Staff report 12-135 includes a summary of these recommendations which Council will be considering on December 4, 2012. Given the technical and complex nature of this issue, we are providing information and clarification on the costs associated with street excavations and the fiscal impact to the City of a partially cost recoverable Street Damage Fee.

FISCAL/POLICY DISCUSSION

Costs Associated with Street Excavations

The Street Preservation Ordinance is intended to increase coordination of planned projects in the public right-of-way and reduce excessive excavations and damage to City Streets, but unscheduled excavations cannot be entirely eliminated. It is important to understand the damage and related costs caused by excavations into streets, since these must be borne by the City and/or excavator. Numerous engineering studies have concluded that damage from excavations extends beyond the edges of the utility cut—known as the area of influence. As illustrated below, excavations through the existing pavement layers damage each layer and reduce the structural integrity of the pavement to some degree. In addition, the weakened pavement near the patch will deteriorate at a faster rate than pavement not affected by patching. Even with high-quality trench repair, the pavement cannot be fully restored to its original condition which causes additional degradation over time and shortens the service life of the street. As a result, the street will require more frequent maintenance and additional rehabilitation costs, such as increased overlay thickness for both the patched and non-patched areas.



Costs Associated with Excavations:

Excavation or Trench Repair – The cost of repairing and patching an excavation.

Street Damage Fee – Higher current and future maintenance costs that the City and/or excavator must pay for the street due to impact of the excavation.

Maintenance Obligation – A warranty period during which the excavator is responsible for repairing failed excavations or trenches.

Source: Nichols, Vallerga, and Associates, City of Seattle: Impact of Utility Cuts on Performance of Seattle Streets.

The purpose of the Street Damage Fee is for the City to recover the cost of the additional resurfacing and repairs needed to mitigate the impact of the excavation. If these higher resurfacing costs are not recovered, they will be borne by the General Fund. In addition, the Street Damage Fee is intended to create an incentive for utilities to coordinate excavations in the streets. It is important to distinguish the Street Damage Fee from the cost of the excavation or trench repair and from the Maintenance Obligation. Trench repair costs are borne by the excavator. The proposed Street Preservation Ordinance encourages excavators to perform quality trench restoration by establishing more stringent requirements for trench restoration for streets within the moratorium.

High-quality trench restoration is also encouraged by the Maintenance Obligation, which is a warranty period during which the excavator is held accountable for repairing a trench if it should fail. Staff initially recommended a Maintenance Obligation of 21 years for all excavators based on the 21-year street resurfacing schedule. Based on the Land Use and Housing Committee's compromise, and after sampling trench failures on streets planned for resurfacing, staff confirmed that most of the trench failures were associated with wet utilities and that 80% of the trench failures occurred within 15 years. Consequently, staff are proposing a warranty period of 15 years for wet utilities and 10 years for dry utilities. If a trench should fail outside of the warranty period, the General Fund would bear the cost of repairs. It is important to note that several cities, such as Escondido, have lifetime Maintenance Obligations. Other cities, such as San Francisco and Sacramento, require a warranty until the street is resurfaced or rebuilt.

Basis of the Fee - 1999 Engineering Study

The Street Damage Fee is calculated based on an engineering study conducted in 1999 for the City of San Diego by Engineering & Research International, Inc. The study assessed the effect of utility cut patching on pavement life; identified several factors that increase pavement rehabilitation costs; and established a fee structure. There are 48 different levels of the fee based on various factors, including the:

- size of the excavation or trench (charged per square foot);
- existing condition of the street (age of last resurfacing);
- street classification (arterial, major, collector, residential); and
- type of utility (wet or dry).

For example, wet utilities would pay a higher fee than dry utilities because the related excavations are larger, deeper, and result in more damage. Private utility representatives have indicated that the study is outdated and that new excavation technologies, such as using a rockwheel trencher, may have a lesser impact on the street because the cuts are not as deep.⁶ While a 13-year old study may seem to be extremely out of date, evaluating how asphalt performs after it is cut and patched is based on the technology and properties of asphalt, which have not changed significantly. As part of the Land Use and Housing Committee's compromise, City staff agreed to review any new excavation technologies and amend the study if needed within two years. Staff estimate that, depending on the needed updates, the study could cost up to \$250,000.

⁶ A rockwheel or wheel trencher is composed of a toothed metal wheel. This trencher can be used in hard or soft soils as well as to cut pavement for road maintenance and gain access to underground utilities.

It is important to note that, in July 2011, the City modified its trench backfill/resurfacing standards to require full depth asphalt. This modification to the old standard of concrete backfill will significantly reduce damage to the streets and any subsequent trench maintenance costs. While these may increase excavators' costs for repairing trenches, they will reduce future maintenance costs and decrease the risk of a failed trench. Staff may want to consider including other methods for repairing trenches in the amended study, as well.

Fiscal Impact to the City of Partial Cost Recovery Street Damage Fee

As discussed earlier in this report, excavations into pavement, no matter how well-repaired, cause additional degradation to streets and require additional maintenance costs. These additional costs must be borne by the excavator and/or the City or the street will continue to degrade and repair will ultimately become much more expensive. The City has almost fully borne these costs since FY 2006, because some private utilities were not being charged a fee.⁷ In addition, municipal utilities previously were not required to pay a fee. Given the City's tight budgetary constraints during this period, many excavated streets have not been maintained. This has impacted the condition of the City's network of streets and contributed in part to the \$478 million backlog of deferred capital for streets.

City Staff initially proposed a full cost recovery fee, also recommended by the OCA and the Grand Jury, which would update the existing fee from 1999 costs to current-year costs. This represents about a 200% increase from the existing fee for dry utilities from a projected total of \$160,000 to \$480,000 per year. As part of the compromise with affected utilities, staff revised their proposal to a Graduated Fee Adjustment for wet and dry utilities which would increase the fee by 25% of the proposed increase in FY 2014 and 50% of the proposed increase in FY 2015. The compromise is intended to give affected utilities time to budget for the increased fee; however, it is important to consider the continuing impact this will have on the General Fund and condition of City streets.

Staff revenue estimates from the Street Damage Fee are conservative, since the revenue account is volatile and not easily projected. As shown in the table below, the Full Cost Recovery Option would have provided \$4 million in both FY 2014 and FY 2015 to be set aside to fund future needed maintenance for the affected streets. With Staff's Proposed Graduated Fee Adjustment, the City's General Fund will have to bear about \$5 million or 60% of the increased maintenance needed for the excavated streets over the two-year period. This is General Fund street maintenance money that could otherwise be used to fund street resurfacing—\$5 million could fund about 10 miles of asphalt overlay or 50 miles of slurry seal. The IBA has also included an Optional Graduated Fee Adjustment which would increase fees by 50% in FY 2014 and go to full cost recovery in FY 2015. With this option, the General Fund would be responsible for about \$2 million or 24% of the needed increased maintenance over the two-year period. This option still allows utilities time to budget for fee increases and for City staff to make any needed updates to the engineering study, but puts less of a burden on the City's General Fund.

⁷ In its 2010 street maintenance audit, the OCA found that excavation fees decreased from \$232,032 in FY 2005 to \$54,453 in FY 2006 with only \$31,684 being collected from FY 2007 through FY 2010.

Fiscal Impact of Street Damage Fees – Comparison of Full and Partial Cost Recovery Options

	FY 2014	FY 2015	Total
Full Cost Recovery			
Water Fund (Maintenance and Future CIP Projects)	\$ 1,540,000	\$ 1,540,000	\$ 3,080,000
Sewer Fund (Maintenance and Future CIP Projects)	1,390,000	1,390,000	2,780,000
Utilities Undergrounding	695,000	695,000	1,390,000
General Permit Issuance	480,000	480,000	960,000
Total	\$ 4,105,000	\$ 4,105,000	\$ 8,210,000
Staff's Proposed Graduated Fee Adjustment			
	25% of the Increase	50% of the Increase	
Water Fund (Maintenance and Future CIP Projects)	\$ 385,000	\$ 770,000	\$ 1,155,000
Sewer Fund (Maintenance and Future CIP Projects)	347,500	695,000	1,042,500
Utilities Undergrounding	173,750	347,500	521,250
General Permit Issuance	240,000	320,000	560,000
Total	\$ 1,146,250	\$ 2,132,500	\$ 3,278,750
Difference (General Fund Share)	\$2,958,750	\$1,972,500	\$4,931,250
IBA Optional Graduated Fee Adjustment			
	50% of the Increase	Full Cost Recovery	
Water Fund (Maintenance and Future CIP Projects)	\$ 770,000	\$ 1,540,000	\$ 2,310,000
Sewer Fund (Maintenance and Future CIP Projects)	695,000	1,390,000	2,085,000
Utilities Undergrounding	347,500	695,000	1,042,500
General Permit Issuance	320,000	480,000	800,000
Total	\$ 2,132,500	\$ 4,105,000	\$ 6,237,500
Difference (General Fund Share)	\$ 1,972,500	\$ -	\$ 1,972,500

Franchise Agreements

All private utility companies generally have state-regulated franchise agreements to pay jurisdictions a franchise fee for utilizing the public right-of-way. In the City of San Diego, monies collected from utilities per franchise agreements are considered General Fund revenue. Franchise fees are not collected to cover damage to the streets due to excavations. However, SDG&E's franchise agreement which was amended in 2002 stipulates that any excavation fee instituted by the City would be taken from the franchise fees. If full cost recovery was adopted, about \$360,000 would be transferred from the General Fund to the Street Damage Fund annually. This amount has not been included in staff's projected revenue from the Street Damage Fee. Council may want to consider revising SDG&E's franchise agreement when it expires in FY 2022.

Fees Charged by Other Cities

Several other jurisdictions require excavators to pay street damage fees, as shown in the following table. These fees vary since they are based on numerous jurisdiction-specific factors, such type of soil and weather conditions. However, the full cost recovery Street Damage Fee initially proposed by City of San Diego is either in line with or below fees charged by other jurisdictions.

Jurisdiction	Street Damage Fee/Trench Cut Fee Range
City of San Diego, CA <i>Existing Fee</i>	\$0-1.05 per square foot (dry utility) \$0-2.12 per square foot (wet utility)
City of San Diego, CA <i>Full Cost Recovery Fee</i>	\$0-2.85 per square foot (dry utility) \$0-5.75 per square foot (wet utility)
Austin, TX	\$3.67-5.22 per square foot
Escondido, CA	\$80 + \$0.25 per linear foot (< 1,000 feet) \$330 + \$0.15 per linear foot (> 1,000 feet)
Los Angeles, CA	\$5.18-21.26 per square foot
Phoenix, AZ	\$320-1000 flat rate (< 9 feet) \$16-50 per linear foot (> 9 feet)
Sacramento, CA	\$1.00-7.50 per linear foot
San Antonio, TX	\$3.11-\$4.67 per square foot
San Francisco, CA	\$1.00-3.50 per square foot
Santa Ana, CA	\$7.61-16.77 (dry utility) \$11.83-26.07 (wet utility)

CONCLUSION/RECOMMENDATION

From FY 2010 through FY 2013, the City will have invested about \$182 million to resurface City streets and plans investments of about \$50 million annually from FY 2014 through FY 2017. The proposed Street Damage Ordinance and updated Street Damage Fee are important steps for protecting this significant investment in infrastructure, because they promote coordination among City departments and private utilities excavating in the public right-of-way; encourage utilities to minimize excavations into newly resurfaced streets; and promote high-quality trench repairs. The Street Damage Fee provides the opportunity for the City to ensure that it will have the funds needed to maintain streets that have been damaged by public or private utilities' excavations now and into the future.

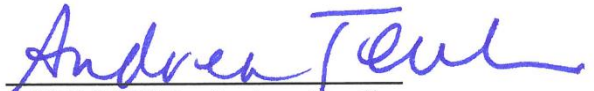
Public and private utilities have not been held fully accountable for these costs in previous years and the City has not had the funds for the increased maintenance needed. This has contributed in part to a low service level and \$478 million backlog of deferred capital for streets. However, the City has moved toward fiscal responsibility and taken steps to improve business practices and operational efficiency, such as through managed competition and streamlining of the Capital Improvement Program (CIP). In addition, achieving 100% full cost recovery for programs intended to be fully cost recoverable through fees is one of the City's guiding principles for elimination of the structural budget deficit.

Given the City's tight budgetary constraints and competing priorities, it is important to understand the impact on the General Fund of not fully recovering costs. With Staff's Proposed Graduated Fee Adjustment, the City's General Fund will have to bear about \$5 million or 60% of the increased maintenance needed for the excavated streets over the two-year period. This is

General Fund street maintenance money that could otherwise be used to fund street resurfacing. We have presented for Council's consideration an Optional Graduated Fee Adjustment increasing fees by 50% in FY 2014 and going to full cost recovery in FY 2015. This option still allows utilities time to budget for fee increases and for City staff to make any needed updates to the engineering study, but puts less of a burden on the City's General Fund—\$2 million or 24% of the needed funds over the two-year period. Council may also want to consider as part of its action on this item, establishing a date or timeframe for when the Street Damage will become fully cost recoverable. The Street Damage Fee Fund will be an important source of funding to mitigate the impact of excavations on City streets.



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